

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/11279

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C03B 3/02, 23/20, 31/00

US CL : 65/28, 134.8

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
U.S. : 65/17.5, 17.6, 43, 56, 28, 134.8

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3,912,534 A (GURTA) 14 October 1975 (14.10.1975), abstract, figs 1-2, col. 1, lines 4-10, col. 1, line 63 to col. 2, line 5.	1-5, 11, 12
Y		6-10, 14-25, 27 and 28
Y	US 5,649,987 A (GREULICH) 22 July 1997 (22.07.1997), col. 2, line 52 to col. 3, line 26, col. 6, lines 21-29.	14, 15
Y	US 5,536,345 A (LINGART) 16 July 1996 (16.07.1996), col. 2, line 34 to col. 3, line 3, col. 5, lines 25-29, col. 6, lines 47-54.	6-10, 16-25, 27 and 28
A	US 5,895,511 A (TIKHONOVA) 20 April 1999 (20.04.1999).	1-28
A	US 6,387,513 B1 (BEYRLE ET AL) 14 May 2002.	1-28
A	US 6,042,905 A (LINGART ET AL) 28 March 2000.	1-28
A	US 4,983,549 A (GREVE) 08 January 1991 (08.01.1991).	1-28
A	US 6,502,424 B1 (DEBAILLEUL) 07 January 2003.	1-28

☒ Further documents are listed in the continuation of Box C.



See patent family annex.

Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

28 July 2004 (28.07.2004)

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**18 JUL 2004**

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Sean E Vincent

Telephone No. (571) 272-1700

Jean Proctor  
Paralegal Specialist

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**C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,460,376 B1 (JEANVOINE ET AL) 08 October 2002.	1-28
A	US 3,900,303 A (MACKENZIE) 19 August 1975 (19.08.1975).	1-28